### **Our Imperiled Wetlands**

Coastal wetlands are among the most productive ecosystems in the world. They are invaluable as hatcheries and feeding areas for young fish. Waterfowl and shorebirds depend on them for breeding sites and as rest stops and refueling stations on their long migration routes. Sedentary animals, such as crabs, worms, insects, and amphibians, thrive in the mudflats and surrounding vegetation. Humans too have relied on wetlands—historically for their rich food supplies and more recently simply for their natural beauty.

But wetlands are also among the most threatened of habitats. In Southern California, more than 90 percent of coastal wetlands have been destroyed since 1850. All of San Diego's 16 coastal wetlands have been severely modified; all now depend on our stewardship if they are to survive.

An estuary is in a state of constant flux. Twice a day, incoming tides cover much of the land and vegetation with salt water. As the cycle continues

and the tide ebbs, either mudflats are exposed (summer) or fresh water from rain-fed creeks (winter) replaces the salt water. As you can imagine, any plant or animal that can survive in these harsh conditions must have evolved special adaptations.

Recently, though, this natural, finely balanced process has been interrupted at San Elijo. Berms built to support two highways and a railroad have severely altered the tidal flows, restricting them from their former course over a broad river plain to the current narrow channel. This has resulted in a buildup of sediment in the lagoon and inhibits the lifegiving exchange of tidal waters. It has also robbed the beach of a natural source of new sand. If this process is not halted, the estuary will eventually become too shallow to promote the life it should. To maintain a healthy estuary, it has been necessary to open the lagoon mouth mechanically.

locations along the hills on the south side of the reserve.

Community	Plants – Indicator species		Birds	Mammals	Reptiles	Insects & crustaceans
Coastal Strand	Ambrosia chamissonis – Bather's delight Lotus nuttallianus – Nuttall's lotus Nemacaulis denudata var. denudata – Coast wooly-heads		California least tern Western snowy plover Killdeer		Silvery legless lizard	Harvester ant
Salt Marsh	Distichlis spicata var. spicata – Saltgrass Frankenia salina – Alkali-heath Salicornia virginica – Woody glasswort		Great blue heron Great egret American avocet Black-necked stilt			Salt marsh skipper (butterfl Salt marsh waterboatman Crab species
Freshwater Marsh	Salix species — Willows Scirpus species — Bullrushes Typha domingensis, T. latifolia — Cattails		Light-footed clapper rail Common yellowthroat Mallard Red-winged blackbird	Racoon Mule Deer	Red-eared turtle (introduced) Two-striped garter snake	Dragonfly (various species) Cranefly Crayfish
Riparian Scrub	Anemopsis californica — Yerba mansa Baccharis salicifolia — Mule fat Populus fremontii — Fremont's cottonwood Salix species — Willows		Black-headed grosbeak Song sparrow White-tailed kite Nuttall's woodpecker	Dusky-footed woodrat	Pacific tree frog Garden slender salamander	Lorquin's admiral (butterfly, Ladybird beetle Ichneumon wasp
Coastal Sage Scrub	Artemisia californica – Coastal sagebrush Baccharis pilularis ssp. consanguinea – Coyote brush Malosma laurina – Laurel sumac Salvia mellifera – Black sage		California gnatcatcher California towhee Roadrunner	Gray fox Desert cottontail rabbit	Orange-throated whiptail San Diego horned lizard Western fence lizard	Cicada Spittlebug Harlequin bug
Mixed Chaparral	Eriogonum californicum – California buckwheat Ceanothus verrucosus – Wart-stemmed ceanothus Rhus integrefolia – Lemonadeberry Xylococcus bicolor – Mission manzanita		California thrasher California quail Spotted towhee Wrentit	Coyote Long-tailed weasel Bobcat	Southern Pacific rattlesnake California kingsnake San Diego alligator lizard	Velvet ant California Prionus beetle Tarantula hawk
sand dunes present challenges to plant and animal life. the east engage of the tides, the majority of the wetlands west of I-5 must deal with a wide the east engage of the tides, the majority of the wetlands west of I-5 must deal with a wide the east engage of the east engage of the tides, the majority of the wetlands west of I-5 must deal with a wide the east engage of the east engage of the east engage of the tides, the majority of the wetlands west of I-5 must deal with a wide the east engage of the			narsh: This community is found along the creek channels at of the reserve, as well as freshwater inlets at the ends of		Coastal sage scrub: Found in a mosaic along the southern side of the reserve, this plant community occupies the hotter, drier slopes and areas of recent disturbance.	
		Riparian scrub: These willow-dominated areas are located near fresh water, but the higher elevations are flooded only during the winter.			Mixed chaparral: Occupying shaded swales and north-facing slopes, this community of larger-leafed plants occurs in protected	

#### **Rules and Regulations**

The County of San Diego Department of Parks and Recreation and the California Department of Fish and Game are jointly responsible for restoring and preserving this area as a sanctuary for critical natural resources. As long as visitors remain sensitive and thoughtful, they can enjoy recreational use of the area while it is being preserved for the wildlife that depends on it.

#### Please observe the following rules:

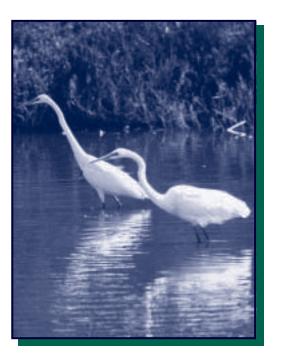
- Walk, jog, or hike on established trails only.
- Fishing from shore with a fishing license is allowed. Nets or seines are not allowed, and commercial fishing of any kind is prohibited. Stay on established trails.
- Do not bring dogs or cats into the Reserve unless they are kept on a leash of 6 feet or less.
- Hunting is not allowed. Any firearm, bow and arrow, air or gas gun, spear gun, or any other weapon is not permitted.
- Fireworks and campfires are not permitted.
- Bicycles, motorcycles, or other vehicles are prohibited.
- Boats, canoes, kayaks, or other floating devices are not allowed.
- Litter can harm wildlife. Please carry your trash out.
- Do not camp in or enter the Reserve after dark.
- Do not disturb or collect any form of plant, animal, or mineral.
- You may not swim, wade, dive, or use any diving equipment.
- Please do not feed the wildlife or release any animals, including domestic species.



Administrative offices 5201 Ruffin Road, Suite P San Diego, CA 92123-1699



# San Elijo Lagoon Ecological Reserve





County of San Diego Department of Parks and Recreation



State of California Department of Fish and Game

## What makes San Elijo Lagoon Ecological Reserve so special?

One of the few remaining coastal wetlands in San Diego County, San Elijo is home to an exceptional number of plants and animals. Within its 885 acres you'll find six plant communities: coastal strand, salt marsh, freshwater marsh, riparian scrub, coastal sage scrub, and mixed chaparral. As you follow the trails through these various habitats, you may be rewarded with encounters with a wide variety of flora and fauna, including:

- More than 300 species of plants, 18 of which are considered rare or endangered.
- At least 20 species of fish, 16 reptiles and amphibians, and more than 80 invertebrates. Many of these animals are rare or threatened, such as the salt marsh skipper butterfly and the San Diego horned lizard.
- 26 mammal species.

• 300 bird species, 76 of which are classified as sensitive. Among these are the light-footed clapper rail, least tern, Belding's savannah sparrow, snowy plover, least Bell's vireo and California gnatcatcher.

Such a wealth of natural resources in one location, as well as the spectacular views, makes San Elijo Lagoon Ecological Reserve a favorite of hikers, joggers, birdwatchers, and nature photographers. Hiking along the three miles of trails is enjoyable any time of year, while birdwatchers find the spring and fall migrations (April–May and August–October) especially productive. Please note: as an ecological reserve, San Elijo Lagoon has no developed facilities on the southern trail system. However, restrooms and water are available at the nature center off Manchester Avenue.

The Reserve is open during daylight hours only.



**CARDIFF BY** THE SEA **RANCHO** SANTA FE **EAST BASIN** ...... **WEST BASIN** SM PACIFIC OCEAN **SOLANA BEACH** LOMAS SANTA FE DR.

### LEGEND

San Elijo Lagoon Ecological Reserve PARK BOUNDARY

HHHH RAILROAD TRACKS

HIKING TRAIL

••••• HIKING & EQUESTRIAN TRAIL

SM SALT MARSH

FM FRESHWATER MARSH

RS RIPARIAN SCRUB

CSS COASTAL SAGE SCRUB

MC MIXED CHAPARRAL



RESTROOM